

Master internship complement-mediated disorders

Department of Pediatrics, Radboudumc

Project duration: at least 6 months

Project starts: October 2020

Background: Complement system is a part of innate immune system. It can be activated by various triggers, such as antibody-antigen complexes, carbohydrates on bacterial surfaces and cell debris. Complement acts via multiple defense mechanisms: release of anaphylatoxins, activation and recruitment of leucocytes to the site of infection, facilitation of phagocytosis and lysis of pathogens.

Healthy human cells are protected from complement attack by complement inhibitors. Genetic aberrations and auto-antibodies can lead to excessive or diminished complement activity. By excessive complement activity healthy human cells can be damaged, whereas by diminished complement activity there may be not enough protection from infections.

Our group performs translational research on complement diseases with genetic cause. Most of our research is focused on renal diseases and we are a part of the Radboudumc center of expertise in Rare Kidney Diseases. The results that we generate within the research projects are translated to patient care. We work in close collaboration with the clinicians and provide state-of-the-art diagnostics for complement-mediated disorders.

Student project: Student will be working on translational project, which will be dedicated to unraveling pathophysiological mechanisms of complement-mediated renal disorders.

Wat will you get:

- In depth knowledge of complement system
- Possibility to expand your network
- Knowledgeable and supportive colleagues

Wat do we expect:

- Strong motivation
- Team work
- Basic lab and reporting skills

To apply please send your CV and a motivation letter to dr. Elena Volokhina (elena.volokhina@radboudumc.nl).

